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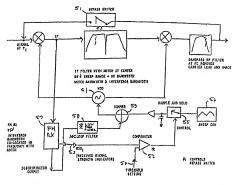
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1) International Application Number: PCT/C/A 2) International Filing Date: 2 February 2000 1) Priority Data: 2 February 1999 (02.02.99) 1) Applicant (for all designated States except US): LO MARTIN CANADA [CA/CA]: 3001 Solandi Roa Ontario KXK 2M8 (CA). 2) Inventors (XK 2M8 (CA). 2) Inventors (Applicants (for US only): JAGGER, E. (CA/CA]: 45 Foursome Crescent, Toronic M2P 1W3 (CA). WILLETTS, Mark. N. [CA TWENTy-Seventy CA]: 28 KNCA, WALLETTS, Mark. N. [CA TWENTy-Seventy CA]: 28 KNCA, WALLETTS, Mark. N. [CA TWENTy-Seventy CA]: 28 KNCA, WALLETTS, Mark. N. [CA]: ANDER (CA). 4) Again: SWARETY OGILLY RENAULT; Suite It McGill College Avenue, Montréal, Québec H3A:	(02.02.0) C CKHER d, Kana Charle, Onta /CA]; 18W 2: Tr., Woo	BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE ES, FI, GB, GD, GE, GH, GM, HR, HU, DI, LI, NI, SI, KE, KG, KP, KR, KZ, LC, LK, LE, LS, LT, LU, LV, MA MD, MG, MK, MN, WM, XM, XN, OX, ZI, EP, EP, RO, RI AS SE, SG, SI, SK, SI, TI, TM, TR, TT, LUA, UG US, UZ, VN, YU, ZA, ZW, AERPO patent (GH, GM, KE LS, MW, SD, SI, SZ, TZ, UG, ZW), Eurasian patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TI, TM), European patent (AM AZ, BY, KG, KZ, MD, RU, TM), TM, TM, TM, TM, TM, TM, TM, TM, TM, TM

(54) Title: MAINTAINING PERFORMANCE QUALITY OF BROADBAND SYSTEM IN THE PRESENCE OF NARROW BAND INTERFERENCE

(57) Abstract

A method and device which dynamically detects, tracks and filters interfering signals with sufficient speed (i.e. within one IS-95 CDMA data frame period, or 20ms) and fidelity to eliminate or greatly reduce the deleterious effects of narrow band interferor signals on a CDMA link. When inserted in an RF signal path an Adaptive Notch Filter (ANF) detects narrow band interferors above a threshold level within the CDMA signal. Detection is accomplished by continuous scanning of a preset excision band, e.g. a specified narrow band associated with an AMPS system. Detected interferors are then automatically acquired and suppressed. This is achieved by electronically placing a rejection notch at the frequency of the interferors.



Mobiliple notes filters may be used to simultaneously suppress multiple interferors. In the absence of interferors a pypass mode is selected allowing the RF signal to bypass the notch. Upon detection of an interferor, a switch is made to a suppression mode where the interferor is steered through a first notch section and suppressed. Alternatively, an external control line may be used to select the bypass mode so that the signal is allowed to pass the noch section, regardless of interferor content.